

REMARKS

Applicant respectfully asks for reconsideration of both this application and the Office Action dated April 22, 2005.

Claims 1-3 and 5-48 are pending in this application. The language of claims 1, 23, and 30 are amended herein to broaden these claims. Specifically, these claims have been revised to clarify that the encrypted portion of a data record need not incorporate the nonce.

In the Office Action, the Examiner first objected to the drawings under 37 C.F.R. §1.121(d). Applicant respectfully traverses this objection, but points out that this objection is now moot. Applicant is submitting new formal drawings concurrently with this Amendment. It is therefore requested that the objection to the drawings be withdrawn.

Next, the Examiner rejected claims 1-10, 12-43, and 45-48 under 35 U.S.C. §103 over U.S. Patent No. 6,125,186 to Saito, et al. Applicant respectfully traverses this rejection, and courteously asks for its reconsideration.

With respect to claims 1-3 and 5-9, these claims recite “using [a] nonce in combination with a previously shared encryption key to decrypt each of the data records without reference to a previously received data record.” Applicant points out that this feature is not taught or suggested by the Saito, et al. patent. In making this rejection, the Examiner alleged that the Saito, et al. patent disclosed this feature of the invention in column 4, lines 50-54, and column 5, lines 13-20. (See Office Action, page 3, lines 18-20.) Applicant points out that column 4, lines 50-54 of the Saito, et al. patent reads:

The trusted agents 14 and 17 can synchronously change the key (a confidential

key) necessary for encryption in accordance with a predetermined rule. This increases the strength of the encryption.

Other than in the claims, it is Applicant's understanding that the Saito, et al. patent never again mentions the term "key." Instead, the Saito, et al. patent subsequently employs the term "initial seed," as evidenced in column 5, lines 13-20, also relied upon by the Examiner:

When encrypted communication is started, first an initial seed is generated in the server 10. The initial seed is, for example, generated based on the time. Next, that initial seed is set in the trusted agents 11 and 14. Then the trusted agent 11 in which the initial seed has been set is sent to the client 15. As discussed above, the trusted agent 11 is transferred after having been encrypted by the RSA or DES method. Then the server 10 starts the trusted agent 14.

Thus, the Saito, et al. patent does not teach the use of an encryption key in combination with another value, as suggested by the Examiner and recited in claims 1-9. Rather, Applicant submits that the Saito, et al. patent interchangeably uses the term "key" and the term "initial seed" to refer to the same value. Accordingly, the Saito, et al. patent would not teach or suggest using a nonce in combination with an encryption key to decrypt a data record, as recited in claims 1-9.

Regarding claims 10-15, these claims recite "generating a nonce for each of a plurality of data records...using the nonce to encrypt each of the plurality of data records and appending the nonce to each of the plurality of data records." Similarly, claims 16-22 recite that "the communication protocol client function encrypts each data record using a nonce and an encryption key and appends the respective nonce to each of the encrypted data records." These features of the invention likewise are not taught or suggested by the Saito, et al. patent.

In rejecting claims 10-22, the Examiner again relied upon the portion of the Saito, et al.

patent at column 5, lines 13-20. Applicant points out that this portion of the Saito, et al. patent is completely silent as to the inclusion of a nonce in an encrypted data record (as is the remainder of the Saito, et al. patent). Instead, the Saito, et al. patent discloses uses an initial seed to generate a pseudo random number, and then adding that pseudo random number to data in order to encrypt the data. (See column 8, lines 53-60 and Fig. 7B.) The Saito, et al. patent does not, however, teach or suggest appending the initial seed to the encrypted data.

It also discloses appending a sequence number to each segment of encrypted data. (See, e.g., column 11, lines 45-61 and Fig. 12A.) The Saito, et al. patent does not, however, teach or suggest using the sequence number to encrypt the data segment. Accordingly, Applicant submits that nothing in the Saito, et al. patent would not teach or suggest the features of the invention recited in any of claims 10-15 and claims 16-22.

Regarding claims 23-29, these claims recites “encrypting data records such that each data record incorporates a nonce such that the remote computer can decrypt each of the data records by using the nonce in combination with a previously shared encryption key.” Similarly, each of claims 30-37 recites “decrypting...data records by using the nonce in combination with a previously shared encryption key.” As previously discussed, nothing in the Saito, et al. patent would teach or suggest the use of a nonce in combination with an encryption key to either encrypt or decrypt data records. Applicant therefore urges that the Saito, et al. patent would not teach or suggest the features of the invention recited in any of these claims.

With particular regard to claim 19, Applicant points out this claim recites that the communication protocol client function and the communication protocol server function are

compatible with the SOCKS communication protocol. In rejecting claim 19, however, the Examiner refers to the portion of the Saito, et al. patent at column 17, lines 10-25 and column 18, lines 20-30. Applicant has carefully reviewed these portions of the Saito, et al. patent, and can find no reference to the SOCKS communication protocol.

Claim 20 then recites that the communication protocol client function and the communication protocol server function are compatible with the SSL/TLS communication protocol. In rejecting this claim, the Examiner referred to the portions of the Saito, et al. patent at column 17, lines 27-34, and at column 17, lines 65 to column 18, line 57. Again, Applicant has carefully reviewed these portions of the Saito, et al. patent, and can find no reference to the SSL/TLS communication protocol. Accordingly, if the Examiner believes any of the cited portions of the Saito, et al. patent inherently refer to the SOCKS communication protocol and/or the SSL/TLS communication protocol, then it is respectfully requested that the Examiner clarify this discrepancy.

In summary, Applicant respectfully submits that the Saito, et al. patent would not teach or suggest the features of the invention recited in any of claims 1-10, 12-43 and 45-48. Applicant therefore asks that the rejection of these claims over the Saito, et al. patent be withdrawn.

Lastly, claims 11 and 44 were rejected under 35 U.S.C. §103 over the Saito, et al. patent in view of U.S. Patent Publication No. 2002/0101848 to Lee, et al. Applicant respectfully traverses this rejection, and courteously asks for its reconsideration as well. As discussed in detail above, it is believed that the Saito, et al. patent does not teach or suggest the various features of the invention recited in these claims. Moreover, Applicant respectfully submits that

the Lee, et al. patent publication does not remedy the omissions of the Saito, et al. patent.

Accordingly, Applicant respectfully submits that no combination of the Saito, et al. and Lee, et al. patent documents would teach or suggest the features of the invention recited in either of claims 11 and 44. It is therefore requested that the rejection of these claims over the combination of the Saito, et al. and Lee, et al. patent documents be withdrawn.

It is believed that no fees are due for the entry and consideration of this Amendment. If, however, the Examiner deems that fees are necessary to maintain the pendency of this application (including any fees under 35 U.S.C. §1.16 and §1.17), then the Commissioner is authorized to charge such fees to the deposit account of the undersigned, Deposit Account No. 19-0733.

In view of the above amendments and remarks, Applicants respectfully submit that all of the claims are allowable, and that this application is therefore in condition for allowance. Applicants courteously ask for favorable action at the Examiner's earliest convenience.

Respectfully submitted,

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